

Title (en)

PRE-PREG, FIBER-REINFORCED COMPOSITE MATERIAL, AND THERMOPLASTIC RESIN PARTICLES

Title (de)

PREPREG, FASERVERSTÄRKTER VERBUNDSTOFF UND THERMOPLASTISCHE HARZPARTIKEL

Title (fr)

PRÉIMPRÉGNÉ, MATÉRIAU COMPOSITE RENFORCÉ DE FIBRES ET PARTICULES DE RÉSINE THERMOPLASTIQUE

Publication

**EP 2949689 A4 20160907 (EN)**

Application

**EP 14743437 A 20140124**

Priority

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Abstract (en)

[origin: EP2949689A1] The invention provides a prepreg that can give a fiber-reinforced composite material exhibiting stable and excellent interlaminar fracture toughness and impact resistance under wide molding conditions. The prepreg includes at least a reinforcement fiber [A], a thermosetting resin [B], and the following component [C] wherein 90% or more of the material [C] is present inside a region of the prepreg that extends from any surface of the prepreg to a prepreg site having, from the surface, a depth of 20% of the thickness of the prepreg. The component [C] satisfies requirements that (i) the storage elastic modulus G' of the material constituting the particles is more than 1 MPa, and 70 MPa or less at 180°C, and that (ii) the ratio of the storage elastic modulus G' of the material constituting the particles at 160°C to the storage elastic modulus G' of the material at 200°C ranges from 1 to 5; and is insoluble in the thermosetting resin [B].

IPC 8 full level

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**C08J 5/243** (2021.05 - EP US); **C08L 29/04** (2013.01 - US); **C08L 63/00** (2013.01 - US); **C08L 77/00** (2013.01 - US); **C08J 2363/00** (2013.01 - EP US)

Citation (search report)

- [X] JP 2009221460 A 20091001 - TORAY INDUSTRIES
- [X] EP 2147035 B1 20110615 - HEXCEL CORP [US]
- [E] EP 2738202 A1 20140604 - TORAY INDUSTRIES [JP]
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- See references of WO 2014115844A1

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DOCDB simple family (publication)

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DOCDB simple family (application)

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